

OUTLET INSTALLATION

FOR CORRUGATED TANKS & CONCRETE TANKS WITH REMOVABLE OUTLETS

Your outlets/inlets should already have been removed prior to installing your ABGAL liner.

If your fitting is removable it can be reused, provided it will clamp the liner against the tank wall to make a watertight seal. If the fitting is fixed, it should have been removed and a new hole made to accommodate a new flanged fitting, prior to liner installation. In most cases, it's simpler to install a new fitting.

Once your liner is in place, cut a hole in the liner for the outlet. Before cutting the hole, ensure there is enough slack around the hole to prevent the liner from over-stressing around the fitting. There should be no tension on the liner at the fitting. You can release any tension by adjusting the overlap above the fitting.

STEP 1 – CUT HOLE IN LINER

Cut a neat hole through the liner, slightly smaller than the diameter of your fitting. If the fitting is 50mm (2") in diameter, cut a hole around 45mm (1 3/4 ") in size. (10)

STEP 2 – APPLY SILICONE

Squeeze a good bead of silicone between the liner and the tank wall. (11)

Between the flange and the liner, use a rubber gasket if supplied with the fitting (12). Insert the fitting from the inside, through the liner and the wall of the tank and tighten it from the outside. As it is tightened (13), some silicone will squeeze out between the liner and the tank. This will provide a watertight seal.

FOR CONCRETE TANKS WITH FIXED OUTLETS

STEP 1 – MAKE FACEPLATE

You'll need to make a faceplate to fix to the wall around the outlet and seal the liner. The best material to use for this is stainless steel but you can use a rigid PVC sheet 6-10mm thick. Cut it out about 100mm (4") larger than the outlet all around. (eg; if the outlet hole is 50mm (2"), make the faceplate 250mm (10") in overall size).

Pre-fasten the template to the inside wall of the tank so any drilling is done before the installation of the liner. (14) The faceplate will squeeze the liner and the silicone tight to the surface of the wall. You will need to add some silicone between the plate and the liner to prevent leakage through the fastening holes. Make sure you use a non-corrosive fastener like stainless steel dynabolts, nylon rawl plugs and stainless steel PK screws, or other expanding nylon anchors.

STEP 2 – CUT HOLE IN LINER

Cut a neat hole through the liner, slightly smaller than the diameter of your fitting (15). If the fitting is 50mm (2") in diameter, cut a hole around 45mm (1 3/4 ") in size.

STEP 3 – APPLY SILICONE AND FIX FACEPLATE

Squeeze plenty of silicone between the liner and the tank wall around the hole you have just cut. (16) Push the liner against the silicone sealant and against the wall around the outlet. Put a small ring of silicone around the fastener holes on the back of the faceplate and position it over the outlet hole and against the liner. (17) Locate the fastening holes with a nail or small screwdriver. Secure the plate firm against the wall of the tank so the silicone forms a waterproof gasket. Re-trim the liner inside the flange and remove any excess silicone.

STEP 4 – APPLY MORE SILICONE

After the plate is completely fixed to the wall, run a bead of silicone around the edge of the plate and over the fasteners to ensure a watertight seal. (18)

STEP 5 – CHECK LINER

Fill the tank with a small amount to water. Climb inside and check the liner for any high stress points around the base. Release tension by repositioning the liner slightly.

Now you can relax because you are no longer losing valuable water from your tank.



(10)



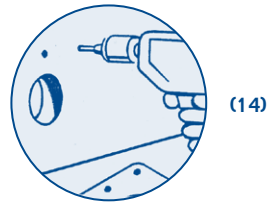
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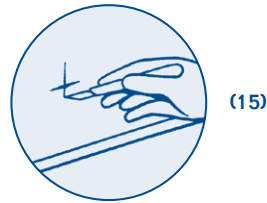
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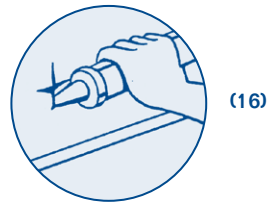
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HOW TO INSTALL YOUR TANK LINER

BEFORE YOU START YOU WILL NEED:

- Fixing extrusion
- Ladder
- Stanley knife
- Rubber mallet
- Hacksaw
- File
- Tarp or groundsheet
- Drill (preferably cordless) with 5mm bit
- 1 cartridge of silicone natural cure sealant per 6m of perimeter of tank
- Wet/dry vacuum or dust pan and brush
- A roll of PVC or duct tape
- Chalk Stick (optional)
- 5mm pop rivets and rivet gun
- Screwdriver/stilson for removing fitting
- Old garden hose and wire (optional)
- Outlet fitting (optional)
- Faceplate (optional)
- Masonry fasteners (optional)

PLEASE READ CAREFULLY BEFORE COMMENCING INSTALLATION.

PREPARATION FOR LINER INSTALLATION

STEP 1 – EMPTY TANK

Firstly, empty the tank then look inside at the condition of the walls and floor. Pay particular attention to any sharp objects or protrusions which may damage your liner.

Remove all debris from inside the tank.

STEP 2 – COVER ROUGH OR SHARP AREAS

Cover any rough or sharp areas with something that will smooth the surface and protect the liner (eg; heavy duty tape). If you find holes in the tank that are larger than 5mm in diameter, you need to cover them with something (eg. duct tape) that will prevent your ABGAL liner from poking through the hole and being damaged.

If you notice that the floor of the tank is particularly rough, lay some newspaper or a thin layer of fine sand over the floor to protect your liner from being damaged during installation.

STEP 3 – REMOVE OUTLETS

Remove the outlets in your tank either: undoing them where possible, or sawing them off to leave a smooth surface. Please read 'Outlet installation', explained later in this booklet.

LINER INSTALLATION

INSTALLATION FOR CLOSED TOP TANKS BOTH CORRUGATED IRON AND CONCRETE

There is no need to remove the lid or roof of the tank to attach the ABGAL liner. If you can gain access to the inside of the tank, you can fit the liner in there also.

NOTE: For closed top tank, we recommend that you install a vent (e.g. 'whirlybird' type) into the lid, to allow the build-up of heat in the tank to escape.

STEP 1 - THE FIXING EXTRUSION

Attach the fixing extrusion (a fitting used to hold the liner in place) near the top of the wall of the tank around the entire circumference. We recommend using the specifically designed two-part fixing extrusion, called 'Waterline', available from your ABGAL liner supplier (1 and 2).

It is the easiest to use, is supplied in 3m lengths and may be cut shorter for ease of handling inside the tank.

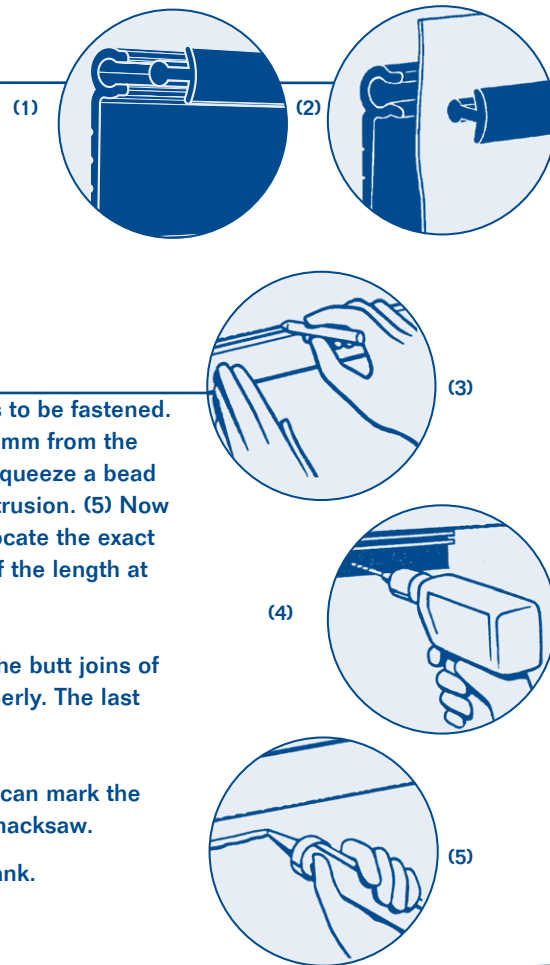
STEP 2 - ATTACH FIXING EXTRUSION

Mark a line around the perimeter of the tank where the top of the extrusion is to be fastened. (3) Position the first piece of extrusion just under the line and drill a hole 150mm from the end (4), through the extrusion and into the tank. Remove the extrusion and squeeze a bead of silicone sealant 20mm under the line, long enough for the first piece of extrusion. (5) Now position the extrusion on top of the silicone using a rivet in the drill hole to locate the exact position. Pop the rivet to secure the extrusion and continue to drill the rest of the length at 150mm intervals.

Repeat this procedure for each length of extrusion until the last. Make sure the butt joints of each piece of extrusion are aligned, otherwise the insert strip will not fit properly. The last length will probably be longer than needed.

Drill the first hole as before, then use a rivet to hold one end in place so you can mark the exact length you need. Remove the extrusion and trim it down to size with a hacksaw.

Remove any burrs from the saw cut and attach the length to the wall of the tank.



STEP 3 - REMOVE ALL DEBRIS

With a vacuum or dustpan & brush, remove all the debris from the installation of the extrusion. Your tank is now ready to receive the ABGAL liner.

STEP 4 - REMOVE LINER FROM BOX

On the lawn, put down a tarp or groundsheet for protection from stones etc... and remove the liner from the box. Unfold it and roll into a long roll. Use an old towel around the access hole to protect the liner from sharp metal edges as you carefully pass the liner through the hole of the tank.

STEP 5 - UNFOLD THE LINER

Once inside the tank, unfold the liner across the floor. You'll need to find the seam perimeter where the floor of the liner meets the wall. This will enable you to centre the liner in the tank before you fit the walls of the liner to the fixing extrusion.

STEP 6 - LIFT LINER UP TO MEET EXTRUSION

Take the top of the wall of the ABGAL liner and lift it up to meet the extrusion strip which is fastened against the tank wall (6). Make sure there are no diagonal wrinkles, as these mean that the top of the liner is not square with the base. If diagonal wrinkles appear, move the top of the liner in the opposite direction to correct the wrinkle. Ensure there is sufficient slack in the wall of the liner so there'll be no stress on the liner around the tank fittings.



STEP 7 - CLIP INTO PLACE WITH MALE INSERT

Using the male insert part of the Waterline extrusion, clip the liner into place (7). Do not hammer the insert into the extrusion as it may cut the liner. If it is aligned properly it will 'slip' into position by pushing on it with your two thumbs. Once you have inserted the start with your thumbs, you can use the rubber mallet to gently 'tap' the male insert into place. Start the next length with your thumbs then use the mallet. It is important to align the male insert with the female extrusion before pushing it into place. If it is not aligned and you force it, you can damage the liner.



Continue around the perimeter of the tank until the liner is completely fastened. You may have to gather the vinyl a little as you go. If there is too much to stretch or gather in any one area, you'll need to unclip part or all of the liner and refasten it.

INSTALLATION FOR OPEN TOP TANKS BOTH CORRUGATED IRON AND CONCRETE

The walls and floor of the tank must be prepared the same as for a tank with a closed top.

STEP 1 - CHECK FOR SHARP EDGES

Check the top rim of the tank for rough or sharp edges that may damage your liner. You may choose to cover the edge with a few layers of heavy duty PVC tape or an old garden hose, slit down the centre opened up and pushed onto the top edge of the tank.

NB: The garden hose is only suitable for corrugated iron tanks.

STEP 2 - INSERT ABGAL LINER INTO TANK

Place the liner inside the tank. Open it up, unroll it, and position the base of the liner centrally on the floor of the tank.

STEP 3 - FOLD EDGE OF LINER OVER TOP OF TANK

Pick up the edge of the liner and fold it over the top of the tank with an overlap of around 100mm (4"). As you fold it over; make sure no diagonal wrinkles appear as it means the liner is not square with the base. If diagonal wrinkles appear move the top of the liner in the opposite direction of the wrinkle to correct it. Adjust the overlap so the liner is loose in height to allow for any take up when the tank fills with water.

STEP 4 - FASTEN LINER TO TANK TOP

One way to secure the liner is using the length of garden hose with wire threaded through it. (8) This is tightened around the outside of the tank on top of the wall overlap (9). The garden hose will protect the liner from the wire and is long-lasting. An alternative is to use a rope band but the rope may deteriorate in time and release the liner.

